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 DICTIONARY FILE UPDATES: 30 NOV 2008 HIGHEST RN 1077629-73-2

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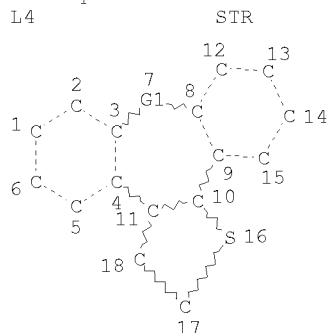
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<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que sta l8



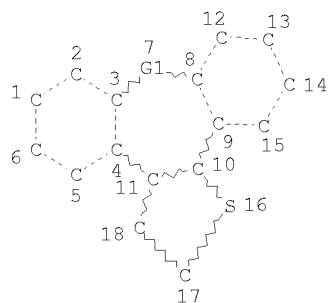
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE  
 L8 358 SEA FILE=REGISTRY SSS FUL L4

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 SEARCH TIME: 00.00.01

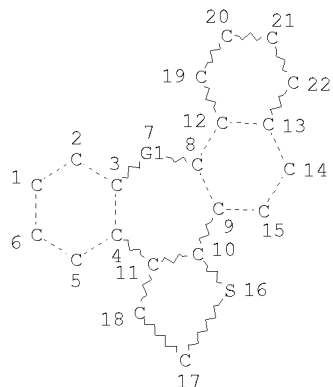
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GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 18

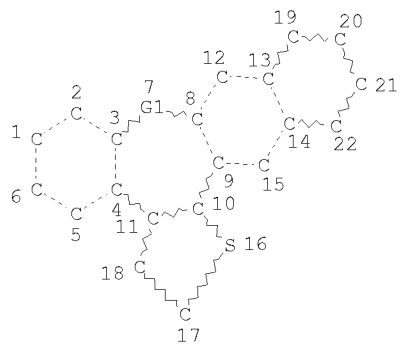
STEREO ATTRIBUTES: NONE  
 L5 STR



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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE  
 L6 STR



VAR G1=O/S  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE  
L8 358 SEA FILE=REGISTRY SSS FUL L4  
L10 45 SEA FILE=REGISTRY SUB=L8 SSS FUL (L5 OR L6)

100.0% PROCESSED 45 ITERATIONS 45 ANSWERS  
SEARCH TIME: 00.00.01

=> b hcap  
FILE 'HCAPLUS' ENTERED AT 17:17:57 ON 02 DEC 2008  
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FILE COVERS 1907 - 2 Dec 2008 VOL 149 ISS 23  
FILE LAST UPDATED: 1 Dec 2008 (20081201/ED)

HCAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

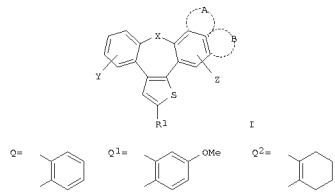
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitrn fhitr l15 tot

L15 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on SIN  
AN 2007:959196 HCAPLUS  
DN 147:322957  
TI Preparation of 1- or 3-thia-benzonaphthoazulenes  
necrosis factor production and intermediates for  
IN Mercep, Mladen; Mesci, Milan; Pescic, Dijana; Ozim  
PA Glaxosmith Kline Istrazivocki Centar Zagreb, D.O.  
SO U.S., 18pp., Cont.-in-part of Appl. No. PCT/HR03/

CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 2

[illegible]

The present intention is to restrict the name benzophenanthroazulene derivative to the phenylene class I; X = CH<sub>2</sub>, O, S, Si(O), Si(O)<sub>2</sub>, or (unprotected) NH; Y, Z = H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, n-Pr, i-Pr, n-Bu, i-Bu, t-Bu, Ph, CH<sub>2</sub>Ph, CH<sub>2</sub>CH<sub>2</sub>Ph, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Ph, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Ph, n-C<sub>4</sub>-alkoxy, CF<sub>3</sub>O, C<sub>2</sub>H<sub>5</sub>OC<sub>2</sub>H<sub>5</sub>, NH<sub>2</sub>, amino, C<sub>1</sub>-alkyl, C<sub>2</sub>-alkyl, C<sub>3</sub>-alkyl, n-C<sub>4</sub>-alkyl, amino, N-methyl-C<sub>4</sub>-alkyl, amino, SH, C<sub>1</sub>-alkynyl, C<sub>2</sub>-alkynyl, C<sub>3</sub>-alkynyl, C<sub>4</sub>-alkynyl, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, 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L15 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
group) and their pharmacol. acceptable salts and solvates. These compds. inhibit the prodn. of tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ) and interleukin-1 (IL-1), associated with TNF- $\alpha$  and IL-1, and are useful for treating inflammation assoc. with TNF- $\alpha$ , in particular rheumatoid arthritis. Thus, Et 2-mercaptoacetate (0.005 mol) and triethylamine (1.0 mL) were added to a soln. of 2,6-di-*n*-octyl-4-methyl-1,4-dicyclohexyl-3-carboxaldehyde (0.005 mol) in 10 mL pyridine and the mixt. was refluxed under stirring for 3 h to give 8-oxa-1-thiazeno[e]naphtho[3,2-*b*]heptene-2-carboxylic acid. After esterification with a white soln. of 2,6-di-*n*-octyl-4-methyl-1,4-dicyclohexyl-2-[(8-oxa-1-thiazeno[e]naphtho[3,2-*b*]heptene-2-ylmethoxyethyl)amine and dimethyl-1,1,1-trimethoxy-8-oxa-1-thiazeno[e]naphtho[3,2-*b*]heptene-2-ylmethoxypropylamine, showed activity against tumor growth in mice. The inhibitory activity of the compd. on TNF- $\alpha$  and IL-1 secretion in human peripheral blood mononuclear cells or mouse peritoneal macrophages, resp., in vitro. (2) Inhibitory action on tumor growth in mice. (3) Inhibitory activity in a murine arthritis assay. For rheumatoid activity in mice, compd. (3) was induced in mice.

613671-14-0P, 8-Oxa-1-thiabenz[e][naphtho(3,2-b)azulene-2-carboxylic acid ethyl ester 613671-15-1P,  
613671-16-0P, 1,8-Dithiabenz[e][naphtho(3,2-b)azulene-2-carboxylic acid ethyl ester 613671-17-3P,  
613671-18-4P, 1-Methoxy-8-oxa-1-thiabenz[e][naphtho(3,2-b)azulene-2-carboxylic acid ethyl ester 613671-19-5P,  
9,10,11,12-Tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulene-2-carboxylic acid ethyl ester 613671-20-9P,  
10,11,12,13-Tetrahydro-8-oxa-1-thiabenz[e][naphtho(3,2-h)azulene-2-carboxylic acid ethyl ester 613671-21-9P,  
1,8-Dithiabenz[e][naphtho(3,2-b)azulene-2-yl]methanol 613671-22-0P, (1,8-Dithiabenz[e][naphtho(3,2-b)azulene-2-yl]methanol 613671-23-2P,  
1,8-Dithiabenz[e][naphtho(1,2-h)azulen-2-yl]methanol 613671-24-2P,  
(8-Oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methanol 613671-25-3P, (1-Methoxy-8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methanol 613671-26-4P,  
9,10,11,12-Tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methanol 613671-27-5P,  
10,11,12,13-Tetrahydro-8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methanol 613671-28-6P,  
Dimethyl-2-[(8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-29-5P,  
Dimethyl-2-[(8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-30-0P,  
2-[(8-Oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-31-1P, Dimethyl-2-[(1,8-dithiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-32-2P,  
Dimethyl-2-[(1,8-dithiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-33-1P,  
Dimethyl-2-[(1,8-dithiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-34-4P,  
Dimethyl-2-[(8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-35-5P,  
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Dimethyl-2-[(8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-37-7P,  
Dimethyl-2-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-38-8P,  
Dimethyl-2-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-39-9P,  
Dimethyl-2-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-40-2P,  
Methyl-2-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e][naphtho(1,2-h)azulen-2-yl]methoxy]propylamine 613671-41-4P,  
Dimethyl-2-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-42-4P,  
Dimethyl-2-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e][naphtho(3,2-h)azulen-2-yl]methoxy]propylamine 613671-43-5P,

L15 ANSWER 1 for 3 HCAPLUS COPYRIGHT 2008 ACS on 5/7N (Continued)

4-[(2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenzene[naphtho[3,2-h]azulen-2-yl)methoxy]ethyl]pyridine-6-yl)methyl]benzene 613671-45-7P

1-[(2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenzene[naphtho[3,2-h]azulen-2-yl)methoxy]ethyl]pyridine-6-yl)methyl]benzene 613671-45-7P

1-[(2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenzene[naphtho[3,2-h]azulen-2-yl)methoxy]ethyl]pyridine-6-yl)methyl]benzene 613671-46-8P

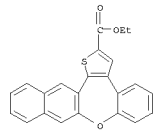
Dimethyl 1-methyl-2-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenzene[naphtho[3,2-h]azulen-2-yl)methoxy]ethyl]pyrrolidine-5,5'-dicarboxylate 613671-45-7P

RU: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

[prep. of 1- or 3-thia-benzonaphthoquinolines as inhibitors of tumor necrosis factor prodn. For treating inflammation and rheumatoid arthritis]

II 613671-14-OP, 8-Oxa-1-thiabenz[e]naphtho[3,2-h]azulene-2-carboxylic acid ethyl ester  
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor necrosis factor production for treating inflammation and rheumatoid arthritis)

RN 613671-14-0 HCAPLUS  
CN Benzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-carboxylic acid, ethyl ester  
(CA INDEX NAME)



RE.CNT 26      THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 AN 2005:729258 HCAPLUS  
 DN 143:179664  
 TI Benzonaphthoazulenes for the manufacture of pharm  
 for the treatment and prevention of central nervo  
 disorders  
 IN Mercpec, Mladen; Mesic, Milan; Pesic, Dijana; Ozim  
 Rudolf; Rupcic, Renata  
 SA Pliva-Istرازivacki Institut D.O.O., Croatia  
 PO PCT Int. Appl., 44 pp.

CODEN: PIRXDD							
DT	Patent						
LA	English						
FAN. CNT 1							
	PATENT NO.	KIND	DATE	APPLICATION NO.			DATE
PI	WO-2005072728		20050811	2005WO-HR00000008			20050127
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	FW:	BW, GB, GR, HK, HE, HU, IL, IN, LU, MA, MD, MG, MK, MN, MU, MV, MW, MY, MZ, NA, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW					
		MR, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, SE, SI, SD, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW					
		RE, NE, SN, TD, TG					
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CH-	1938016		20070328	2006CH-080010392			20050127
JP-	2007519698		20070719	2006JP-000550310			20050127
IT-	2006041320		20070719	2006IT-000641320			20060418
US-	20070173499	A	20070726	2006US-0005087823			20060120
PRAI	2004HR-000000104		20040130				
	2005WO-HR00000008	W	20050127				
OS	MARPAT 143:179664						

AS	<p>The present invention relates to the use of compds. from the group of benzophenophanones and of their pharmaceutically acceptable salts and so on for the treatment of the various pharmacological formulations for the treatment and prevention of diseases, damages and disorders of the central nervous system (CNS) caused by disorders of the neurochem. equilibrium of biogenic amines and other neurotransmitters. Thus, in vitro affinity of 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> benzophenothiazolines for binding to recombinant human 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> serotonin receptors expressed in CHO-K1 or COS-7 cells was determined using [<sup>3</sup>H]-5-HT and [<sup>3</sup>H]-5-HT<sub>2A</sub> and [<sup>3</sup>H]-5-HT<sub>2C</sub> binding assays. Binding was inhibited by the test compounds in a dose-dependently and proportionally to the affinity of a certain compound for the receptor and to the concentration of the compound. Compds. showing IC<sub>50</sub> and K<sub>i</sub> in concns. lower than 100 nM are listed in Table 1.</p> <p>Table 1</p> <table border="1"> <tr> <td></td><td>dimethyl-[1,3,8-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine</td><td>[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine</td><td>[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine</td></tr> <tr> <td>IC<sub>50</sub></td><td>613671-14-0</td><td>613671-15-1</td><td>613671-16-2</td></tr> <tr> <td></td><td>613671-17-3</td><td>613671-18-4</td><td>613671-19-5</td></tr> <tr> <td></td><td>613671-20-8</td><td>613671-21-9</td><td>613671-22-0</td></tr> <tr> <td></td><td>613671-23-1</td><td>613671-24-2</td><td>613671-25-3</td></tr> <tr> <td></td><td>613671-26-4</td><td>613671-27-5</td><td>613671-28-6</td></tr> <tr> <td></td><td>613671-29-7</td><td>613671-30-0</td><td>613671-31-1</td></tr> <tr> <td></td><td>613671-32-2</td><td>613671-33-3</td><td>613671-34-4</td></tr> <tr> <td></td><td>613671-35-5</td><td>613671-36-6</td><td>613671-37-7</td></tr> <tr> <td></td><td>613671-38-8</td><td>613671-39-9</td><td>613671-40-2</td></tr> <tr> <td></td><td>613671-41-3</td><td>613671-42-4</td><td>613671-43-5</td></tr> <tr> <td></td><td>613671-44-6</td><td>613671-45-7</td><td>613671-46-8</td></tr> <tr> <td></td><td>861398-65-8</td><td>861398-66-5</td><td>861398-67-6</td></tr> </table> <p>861398-68-7</p> <p>RU: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)</p> <p>(benzophenothiazolines for manufacture of pharmaceutical formulations for the treatment and prevention of central nervous system diseases and disorders)</p>		dimethyl-[1,3,8-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine	[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine	[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine	IC <sub>50</sub>	613671-14-0	613671-15-1	613671-16-2		613671-17-3	613671-18-4	613671-19-5		613671-20-8	613671-21-9	613671-22-0		613671-23-1	613671-24-2	613671-25-3		613671-26-4	613671-27-5	613671-28-6		613671-29-7	613671-30-0	613671-31-1		613671-32-2	613671-33-3	613671-34-4		613671-35-5	613671-36-6	613671-37-7		613671-38-8	613671-39-9	613671-40-2		613671-41-3	613671-42-4	613671-43-5		613671-44-6	613671-45-7	613671-46-8		861398-65-8	861398-66-5	861398-67-6
	dimethyl-[1,3,8-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine	[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine	[3,3,10,10-dithia-benzo(e)naphtho[3,2-b]azulen-2-ylmethylthio-propyl]-amine																																																		
IC <sub>50</sub>	613671-14-0	613671-15-1	613671-16-2																																																		
	613671-17-3	613671-18-4	613671-19-5																																																		
	613671-20-8	613671-21-9	613671-22-0																																																		
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	613671-26-4	613671-27-5	613671-28-6																																																		
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	613671-32-2	613671-33-3	613671-34-4																																																		
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	613671-44-6	613671-45-7	613671-46-8																																																		
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FILE 'USPATFULL' ENTERED AT 17:18:23 ON 02 DEC 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 17:18:23 ON 02 DEC 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 17:18:23 ON 02 DEC 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

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L17 ANSWER 1 OF 4 USPATFULL ON STN  
 AN 200711981 USPATFULL  
 TI Use of benzonaphthoazulenes for the manufacture of pharmaceutical formulations for the treatment and prevention of central nervous system diseases and disorders  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Bjelovar, CROATIA  
 Rujpico, Renata, Zagreb, CROATIA  
 PI US-20070173499 A1 20070726  
 AI 200505-000587823 A1 20050127 (10)  
 2005WO-HR0000008 20050127  
 PRAI 2004HR-020040104 20040130 PCT 371 date  
 DT Utility  
 FS APPLICATION  
 LREP GLAXOSMITHKLINE, CORPORATE INTELLECTUAL PROPERTY, MAI B475, FIVE MOORE DR., PO BOX 13398, RESEARCH TRIANGLE PARK, NC, 27709-3398, US  
 CLMN Number of Claims: 15  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1058

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to the use of compounds from the group of benzonaphthoazulenes and of their pharmaceutically acceptable salts and solvates for the treatment and prevention of diseases, damages and disorders of the central nervous system (CNS) caused by disorders of the neurochemical equilibrium of biogenic amines or other transmitters, and to methods of manufacture of such compounds.

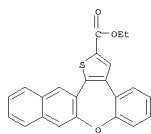
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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 613671-20-8 613671-21-9 613671-22-0  
 613671-23-1 613671-24-2 613671-25-3  
 613671-26-4 613671-27-5 613671-28-6  
 613671-29-7 613671-30-0 613671-31-1  
 613671-32-2 613671-33-3 613671-34-4  
 613671-35-5 613671-36-6 613671-37-7  
 613671-38-8 613671-39-9 613671-40-2  
 613671-41-3 613671-42-4 613671-43-5  
 613671-44-6 613671-45-7 613671-46-8  
 861398-65-4 861398-66-5 861398-67-6  
 861398-68-7

(benzonaphthoazulenes for manufacture of pharmaceutical formulations for treatment and prevention of central nervous system diseases and disorders)

II 613671-14-0 (benzonaphthoazulenes for manufacture of pharmaceutical formulations for treatment and prevention of central nervous system diseases and disorders)

RN 613671-14-0 USPATFULL  
 CN Benzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-carboxylic acid, ethyl ester (CA INDEX NAME)



L17 ANSWER 2 OF 4 USPATFULL ON STN  
 AN 2005159039 USPATFULL  
 TI 1-or 3-thia-benzonaphthoazulenes as inhibitors of tumour necrosis factor production and intermediates for the preparation thereof  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA PLIVA-ISTRAZIVACKI INSTITUT D.D., ZAGREB, CROATIA (non-U.S. corporation)  
 PI US-20050137249 A1 20050623  
 AI 2003US-000510867 A1 20030409 (10)  
 2003WO-HR0000014 20030409  
 PRAI 2002HR-000020303 20020410  
 DT Utility  
 FS APPLICATION  
 LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257, US  
 CLMN Number of Claims: 13  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1480

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to 1- or 3-thiabenzonaphthoazulene derivatives to their pharmacologically acceptable salts and solvates, to processes and intermediates for the preparation thereof as well as to their antiinflammatory effects, especially to the inhibition of tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the inhibition of interleukin-1 (IL-1) production as well as to their analgesic action.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

II 613671-14-0P 613671-15-1P 613671-16-2P  
 613671-17-3P 613671-18-4P 613671-19-5P  
 613671-20-4P 613671-21-9P 613671-22-0P  
 613671-23-1P 613671-24-2P 613671-25-3P  
 613671-26-4P 613671-27-5P

(preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis factor production)

II 613671-38-8P (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis factor production)

II 613671-28-6P 613671-29-7P 613671-30-0P

613671-31-1P 613671-32-2P 613671-33-3P

613671-34-4P 613671-35-5P 613671-36-6P

613671-37-7P 613671-38-9P 613671-40-2P

613671-41-3P 613671-42-4P 613671-43-5P

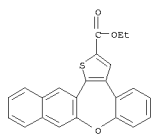
613671-44-6P 613671-45-7P 613671-46-8P

(preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis factor production)

II 613671-14-0P (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis factor production)

RN 613671-14-0 USPATFULL

CN Benzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-carboxylic acid, ethyl ester (CA INDEX NAME)



L17 ANSWER 1 OF 4 USPATFULL ON STN (Continued)

L17 ANSWER 3 OF 4 USPATFULL ON STN  
 AN 2005152050 USPATFULL  
 TI 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor necrosis factor production and intermediates for the preparation thereof  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA Pliva-Istazivacki Institut d.o.o., Zagreb, CROATIA (non-U.S. corporation)  
 PI US-20050130964 A1 20050616  
 US-7262309 B2 20070828  
 AI 2004US-000943979 A1 20041012 (10)  
 RLI Continuation-in-part of Ser. No. 2003WO-HR0000014, filed on 9 Apr 2003, UNKNOWN  
 PRAI 2002HR-020020303 20020410  
 DT Utility  
 FS APPLICATION  
 LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257, US  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1526

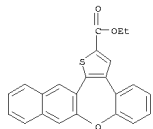
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to benzonaphthoazulene derivatives of thiophene class, to their pharmacologically acceptable salts and solvates, to processes and intermediates for the preparation thereof as well as to their antiinflammatory effects, especially to the inhibition of tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the inhibition of interleukin-1 (IL-1) production as well as to their analgesic action.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

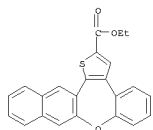
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L17 ANSWER 3 OF 4 USPATFULL on STN (Continued)  
 hiazulen-2-yl)methoxy]ethyl]amine 613671-38-8P,  
 Dimethyl[3-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e]naphtho[1,2-hiazulen-2-yl)methoxy]propyl]amine 613671-39-9P,  
 [3-[(9,10,11,12-Tetrahydro-10-oxa-3-thiabenz[e]naphtho[1,2-hiazulen-2-yl)methoxy]propyl]amine 613671-40-2P,  
 (Methyl)[3-[(9,10,11,12-tetrahydro-8-oxa-1-thiabenz[e]naphtho[1,2-hiazulen-2-yl)methoxy]propyl]amine 613671-41-3P,  
 Dimethyl[2-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]ethyl]amine 613671-42-4P,  
 Dimethyl[3-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]propyl]amine 613671-43-5P,  
 4-[(2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]ethyl]morpholine 613671-44-6P,  
 1-[2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]ethyl]piperidine 613671-45-7P,  
 1-[2-[(10,11,12,13-Tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]ethyl]pyrrolidine 613671-46-8P,  
 Dimethyl[1-methyl-2-[(10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-hiazulen-2-yl)methoxy]ethyl]amine  
 (prepn. of 1- or 3-thia-benzonaphthazulenes as inhibitors of tumor  
 necrosis factor prodn. for treating inflammation and rheumatoid  
 arthritis)  
 IT 613671-14-0P, 8-Oxa-1-thiabenz[e]naphtho[3,2-h]azulene-2-  
 carboxylic acid ethyl ester  
 (preparation of 1- or 3-thia-benzonaphthazulenes as inhibitors of tumor  
 necrosis factor production for treating inflammation and rheumatoid  
 arthritis)  
 RN 613671-14-0 USPATFULL  
 CN Benzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-carboxylic acid, ethyl ester  
 (CA INDEX NAME)



L17 ANSWER 4 OF 4 USPAT2 on STN  
 AN 2005152050 USPAT2  
 TI 1- or 3-thia-benzonaphthazulenes as inhibitors of tumor necrosis factor  
 production and intermediates for the preparation thereof  
 IN Mercop, Milan, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Orimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA GlaxoSmith Kline Istrazivocki Centar Zagreb, D.O.O., CROATIA (non-U.S.  
 corporation)  
 PI US-----7262309 B2 20070828  
 AI 2004US-000963979 20041012 (10)  
 RLI Continuation-in-part of Ser. No. 2003MO-HR0000014, filed on 9 Apr 2003,  
 PENDING  
 PRAI 2003HR-020020303 20020410  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Stockton, Laura L.  
 LREP Young, J. Scott  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DWIN No Drawings  
 LN.CNT 1567  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to benzonaphthazulene derivatives of  
 tiophene class, to their pharmacologically acceptable salts and  
 solvates, to processes and intermediates for the preparation thereof as  
 well as to their antiinflammatory effects, especially to the inhibition  
 of tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the  
 inhibition of interleukin-1 (IL-1) production as well as to their  
 analgetic action.  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 613671-14-0P 613671-15-1P 613671-16-2P  
 613671-17-3P 613671-18-4P 613671-19-5P  
 613671-20-8P 613671-21-9P 613671-22-0P  
 613671-23-1P 613671-24-2P 613671-25-3P  
 613671-26-4P 613671-27-5P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 IT 613671-38-8P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 IT 613671-28-6P 613671-29-7P 613671-30-0P  
 613671-31-1P 613671-32-2P 613671-33-3P  
 613671-34-4P 613671-35-5P 613671-36-6P  
 613671-37-7P 613671-39-9P 613671-40-2P  
 613671-41-3P 613671-42-4P 613671-43-5P  
 613671-44-6P 613671-45-7P 613671-46-8P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 IT 613671-14-0P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 RN 613671-14-0 USPAT2  
 CN Benzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-carboxylic acid, ethyl ester  
 (CA INDEX NAME)

L17 ANSWER 4 OF 4 USPAT2 on STN (Continued)





=> b hcap

FILE 'HCAPLUS' ENTERED AT 17:18:46 ON 02 DEC 2008  
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FILE COVERS 1907 - 2 Dec 2008 VOL 149 ISS 23  
FILE LAST UPDATED: 1 Dec 2008 (20081201/ED)

HCAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

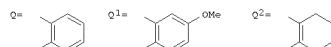
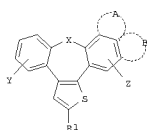
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L16 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
 AN 2007:959196 HCAPLUS  
 DN 147:322957  
 TI Preparation of 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor  
 necrosis factor production and intermediates for the preparation thereof  
 IN Mercop, Mladen; Mesic, Milan; Pesic, Dijana; Ozimec, Ivana; Trojko, Rudolf  
 PA Glaxosmith Kline Istrazivovki Centar Zagreb, D.O.O., Croatia  
 SO U.S., 18pp., Cont.-in-part of Appl. No. PCT/HR03/00014.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US-----7262309	B2	20070828	2004US-000963979	20041012
US-20050130964	A1	20050616		
HR--2002000303	B1	20070531	2002HR-00000303	20020410
WO--2003084961	A1	20031016	2003WO-HR0000014	20030409

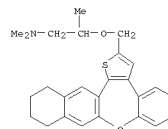
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 RW: GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI 2002HR-00000303 A 20020410  
 2003WO-HR0000014 A2 20030409  
 OS MAPPAT 147:322957  
 GI



AB The present invention relates to benzonaphthoazulene derivs. of thiophene class (I; X = CH<sub>2</sub>, O, S, S(=O), S(=O)<sub>2</sub>, or (un)protected NH; Y, Z = H, halogen, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, CF<sub>3</sub>, halo-C1-4 alkyl, HO, C1-4 alkoxy, CF<sub>3</sub>, C1-4 alkanoyl, NO<sub>2</sub>, amino-C1-4 alkyl, C1-4 alkylamino, N-(C1-4 alkyl)amino, N,N-di-(C1-4 alkyl)amino, SH, C1-4 alkylthio, C1-4 alkylsulfonyl, C1-4 alkylsulfinyl, CO<sub>2</sub>H, C1-4 alkoxy carbonyl, NO<sub>2</sub>; one of the ring A and B is present while the other one is absent, and it is selected from the group consisting of Q, Q1, and Q2; R1 = (un)substituted C1-7 alkyl, C1-7 alkoxy carbonyl, (CH<sub>2</sub>)<sub>m</sub>-Q3-(CH<sub>2</sub>)<sub>n</sub>-Q4-NR<sub>2</sub>R<sub>3</sub>; wherein R<sub>2</sub>, R<sub>3</sub> = H, C1-4 alkyl, or aryl or NR<sub>2</sub>R<sub>3</sub> taken together forms (un)substituted heterocyclyl or heteroaryl; n = an integer of 0-3; m = an integer of 1-3; Q3, Q4 = O, S, C(yl)(Y<sub>2</sub>), N(yl), C(yl)-CH, C-tribond; C: yl, Y<sub>2</sub> = H, halogen, HO, C1-4 alkoxy, C1-4 alkanoyl, SH, C1-4 alkylthio, C1-4 alkylsulfonyl, C1-4 alkylsulfinyl, NO<sub>2</sub>, etc.; or yl and Y<sub>2</sub> taken together with the carbon atom to which they are attached form carbonyl or imino

L16 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
 group) and their pharmaco. acceptable salts and solvates. These compds. inhibit the prodn. of tumor necrosis factor-α (TNF-α) and interleukin-1 (IL-1), possess antiinflammatory or analgetic effects, and are useful for treating inflammation assoc. with TNF-α, in particular rheumatoid arthritis. Thus, Et 2-mercaptoacetate (0.005 mol) and triethylamine (1.0 mL) were added to a soln. of 12-chloro-5-oxabenz[4,5]cyclohepta[1,2-b]naphthalene-13-carboxaldehyde (0.005 mol) in 10 mL pyridine and the mixt. was refluxed under stirring for 3 h to give 8-oxa-1-thiabenz[e]naphtho[3,2-h]azulene-2-carboxylic acid Et ester as a white solid. Two compds., namely dimethyl[2-(8-oxa-1-thiabenz[e]naphtho[1,2-h]azulen-2-ylmethoxy)ethyl]amine and dimethyl[3-(11-methoxy-8-oxa-1-thiabenz[e]naphtho[3,2-h]azulen-2-ylmethoxy)propyl]amine, showed activity in at least two investigated assays selected from (1) inhibitory action on TNF-α and IL-1 secretion in human peripheral blood mononuclear cells or mouse peritoneal macrophages, resp., in vitro, (2) inhibitory action on LPS-induced excessive TNF-α or IL-1 secretion in mice, (3) writhing assay for analgetic activity in mice, and (4) LPS-induced shock in mice.  
 IT 613671-61-7P, Dimethyl[2-((10,11,12,13-tetrahydro-8-oxa-1-thiabenz[e]naphtho[3,2-h]azulen-2-yl)methoxy)propyl]amine  
 RL: PAC (Synthetic preparation); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor necrosis factor production for treating inflammation and rheumatoid arthritis)  
 RN 613671-61-7 HCAPLUS  
 CN 1-Propylamine, N,N-dimethyl-2-((10,11,12,13-tetrahydrobenzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-yl)methoxy)- (CA INDEX NAME)



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
 AN 2003:818427 HCAPLUS  
 DN 139:323507  
 TI Preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor  
 necrosis factor production  
 IN Mercop, Mladen; Mesic, Milan; Pesic, Dijana; Ozimec, Ivana; Trojko, Rudolf  
 PA Pliva D.O., Croatia  
 SO PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

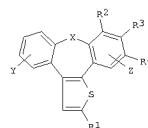
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PI WO--2003084961	A1	20031016	2003WO-HR0000014	20030409

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 RW: GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

HR--2002000303 B1 20070531 2002HR-00000303 20020410  
 CA-----2481850 A1 20031016 2003CA-002481850 20030409  
 RU--2005234958 A1 20031020 2005RU-00234958 20030409  
 EP-----1492795 A1 20050105 2003EP-000745847 20030409  
 EP-----1492795 B1 20051116

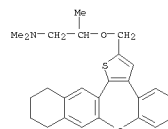
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 BR--2003090997 A 20050209 2003BR-000090997 20030409  
 CN-----1649876 A 20050803 2003CN-000809957 20030409  
 JP--2005526827 T 20050908 2003JP-000582158 20030409  
 AT-----310005 T 20051215 2003AT-000745847 20030409  
 NZ-----535622 A 20060331 2003NZ-000535622 20030409  
 ES-----2253694 T3 20060601 2003ES-000745847 20030409  
 RU-----2318827 C2 20080310 2004RU-000132866 20030409  
 ZA--200408059 A 20051006 2004ZA-000008059 20041006  
 MX-2004090972 A 20050816 2004MX-000090972 20041006  
 US-----7262309 B2 20070828 2004US-000963979 20041012  
 US-20050130964 A1 20050616  
 NO--200404508 A 20041109 2004NO-000004508 20041021  
 JP--200402522 A 20070521 2004JP-000002522 20041109  
 US-20050137249 A1 20050623 2005US-000510867 20050223

PRAI 2002HR-00000303 A 20020410  
 2003WO-HR0000014 W 20030409  
 OS MAPPAT 139:323507  
 GI



AB Thienonaphthazulenes I [X = CH<sub>2</sub>, O, S, S(=O), SO<sub>2</sub>, NH, protected NH; Y, Z = halogen, alkyl, alkenyl, alkynyl, CF<sub>3</sub>, haloalkyl, OH, alkoxy, PCO, acyl, (un)substituted amino, aminoalkyl, SH, alkylthio, alkylsulfinyl, alkylsulfonyl, CO<sub>2</sub>H, alkoxy carbonyl, NO<sub>2</sub>; R1 = halogen, (un)substituted alkyl, alkenyl, alkynyl, aryl, heteroaryl, heterocyclyl, OH, SH, CO<sub>2</sub>H, acyl, CONH<sub>2</sub>, alkylsulfonyl, alkylsulfinyl, NO<sub>2</sub>; R<sub>2</sub>, R<sub>3</sub> = (un)substituted CH<sub>2</sub>-CH=CH<sub>2</sub>, CH=CH<sub>2</sub> were prepared for use as antiinflammatory agents, especially as inhibitors of TNF-α production and interleukin-1 production, as well as analgesics (no data). Thus, I [X = O, Y,

L16 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
 Z, R<sub>4</sub> = H, R<sub>1</sub> = CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub>, R<sub>2</sub>R<sub>3</sub> = CH:CHCH:CH were prepd. from 2-(2-naphthyl)oxy)phenylacetic acid, H<sub>5</sub>NC(CH<sub>2</sub>)<sub>2</sub>Cl, and Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>Cl.HCl.  
 IT 613671-61-7P  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis factor production)  
 RN 613671-61-7 HCAPLUS  
 CN 1-Propylamine, N,N-dimethyl-2-((10,11,12,13-tetrahydrobenzo[b]naphtho[2,3-f]thieno[3,2-d]oxepin-2-yl)methoxy)- (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'USPATOLD' ENTERED AT 17:19:05 ON 02 DEC 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

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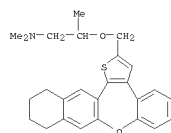
L18 ANSWER 1 OF 3 USPATFULL on STN  
 AN 2005:15039 USPATFULL  
 TI 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumour necrosis factor  
 production and intermediates for the preparation thereof  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA PLIVA-ISTRIZIVACKI INSTITUT D.D., ZAGREB, CROATIA (non-U.S.  
 corporation)  
 PI US-20050137249 A1 20050623  
 AI 2003US-000510867 A1 20030409 (10)  
 2003WO-HR0000014 20030409  
 PRAI 2002HR-000020303 20020410  
 DT Utility  
 FS APPLICATION  
 LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257, US  
 CLMN Number of Claims: 13  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1480

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to 1- or 3-thiabenzonaphthoazulene  
 derivatives to their pharmacologically acceptable salts and solvates, to  
 processes and intermediates for the preparation thereof as well as to  
 their antiinflammatory effects, especially to the inhibition of tumour  
 necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the inhibition of  
 interleukin-1 (IL-1) production as well as to their analgetic action.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 613671-61-7P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 RN 613671-61-7 USPATFULL  
 CN 1-Propanamine, N,N-dimethyl-2-[(10,11,12,13-tetrahydrobenzo[b]naphtho[2,3-  
 f]thieno[3,2-d]oxepin-2-yl)methoxy]- (CA INDEX NAME)



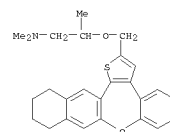
L18 ANSWER 2 OF 3 USPATFULL on STN  
 AN 2005:152050 USPATFULL  
 TI 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor necrosis factor  
 production and intermediates for the preparation thereof  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA Pliva-Istrazivacki Institut d.o.o., Zagreb, CROATIA (non-U.S.  
 corporation)  
 PI US-20050139964 A1 20050616  
 US-7262309 B2 20070828  
 AI 2004US-000963979 A1 20041012 (10)  
 RLI Continuation-in-part of Ser. No. 2003WO-HR0000014, filed on 9 Apr 2003,  
 UNKNOWN  
 PRAI 2002HR-020020303 20020410  
 DT Utility  
 FS APPLICATION  
 LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257, US  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1526

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to benzonaphthoazulene derivatives of  
 tiophene class, to their pharmacologically acceptable salts and  
 solvates, to processes and intermediates for the preparation thereof as  
 well as to their antiinflammatory effects, especially to the inhibition  
 of tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the  
 inhibition of interleukin-1 (IL-1) production as well as to their  
 analgetic action.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 613671-61-7P, Dimethyl 2-[(10,11,12,13-tetrahydro-8-oxa-1-  
 thiabenz[e]naphtho[3,2-b]azulen-2-yl)methoxy]propylamine  
 (preparation of 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor  
 necrosis factor production for treating inflammation and rheumatoid  
 arthritis)  
 RN 613671-61-7 USPATFULL  
 CN 1-Propanamine, N,N-dimethyl-2-[(10,11,12,13-tetrahydrobenzo[b]naphtho[2,3-  
 f]thieno[3,2-d]oxepin-2-yl)methoxy]- (CA INDEX NAME)



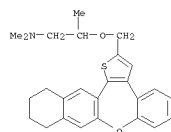
L18 ANSWER 3 OF 3 USPAT2 on STN  
 AN 2005:152050 USPAT2  
 TI 1- or 3-thia-benzonaphthoazulenes as inhibitors of tumor necrosis factor  
 production and intermediates for the preparation thereof  
 IN Mercep, Mladen, Zagreb, CROATIA  
 Mesic, Milan, Zagreb, CROATIA  
 Pesic, Dijana, Sibenik, CROATIA  
 Ozimec, Ivana, Trnovec, CROATIA  
 Trojko, Rudolf, Zagreb, CROATIA  
 PA GlaxoSmith Kline Istrazivocki Centar Zagreb, D.O.O., CROATIA (non-U.S.  
 corporation)  
 PI US-7262309 B2 20070828  
 AI 2004US-000963979 20041012 (10)  
 RLI Continuation-in-part of Ser. No. 2003WO-HR0000014, filed on 9 Apr 2003,  
 PENDING  
 PRAI 2002HR-020020303 20020410  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Stockton, Laura L.  
 LREP Young, J. Scott  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1567

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to benzonaphthoazulene derivatives of  
 tiophene class, to their pharmacologically acceptable salts and  
 solvates, to processes and intermediates for the preparation thereof as  
 well as to their antiinflammatory effects, especially to the inhibition  
 of tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ) production and the  
 inhibition of interleukin-1 (IL-1) production as well as to their  
 analgetic action.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 613671-61-7P  
 (preparation of 1- or 3-thienonaphthazulenes as inhibitors of tumor necrosis  
 factor production)  
 RN 613671-61-7 USPAT2  
 CN 1-Propanamine, N,N-dimethyl-2-[(10,11,12,13-tetrahydrobenzo[b]naphtho[2,3-  
 f]thieno[3,2-d]oxepin-2-yl)methoxy]- (CA INDEX NAME)



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L1 1 US20070173499/PN

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L2 TRA L1 1- RN : 41 TERMS

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L3 41 SEA L2

L4 STR

L5 STR L4

L6 STR L4

L7 16 L4

L8 358 L4 FULL

SAV TEM J823C1M/A L8

L9 6 (L5 OR L6) SAM SUB=L8

L10 45 (L5 OR L6) FULL SUB=L8

SAV TEM J823C1MN/A L10

L11 37 L10 AND L3

L12 8 L10 NOT L11

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L15 3 L11

L16 2 L12

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L17 4 L11

L18 3 L12

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